IV-03 Process Change Request

Purpose

Changes in design, specification, or process are likely to occur over the life of a product. The Process Change Request (PCR) system tracks changes to parts or processes, and provides documented approval and accurate records of any change that occurs to parts or processes. The PCR system helps to ensure final product quality by providing a way to identify, review, and control change points.

The PCR system applies to mass production, service parts, components, and materials shipped to ADVICS. This includes all raw materials used in products produced for ADVICS at the supplier, sub-supplier, or sub-supplier vendors providing materials.

Supplier Responsibility

General Requirements

The supplier's quality department is responsible for understanding the contents of any change and ensuring the change has no negative effect on the overall product quality. Parts delivered to more than one ADVICS plant may require additional PCRs.

If the supplier already has a PPAP notification for a particular change then there is no need to use the PCR process.

Successful process change requests:

1. Come from suppliers who commits to a 120 day written notice (e.g. PCR Form IV-03-F01) prior to conducting changes. Suppliers need to understand that changes can take several months for approval. The supplier should contact the ADVICS PUR Buyer to inform ADVICS the desire to make a change by submitting PCR Form (IV-03-F01).
2. Have supporting documents that help explain the change and the supplier's vision to assure the change. Examples could be
    a. **Change Point Details**: Organize change point details in written format including process, materials, supply chain flow, tooling, equipment, etc.
    b. **Schedule / Confirmation Plan**: Create a detailed schedule that includes your prosed confirmation plan accompanying the PCR form.
3. There are three items to keep in mind while planning for process changes that could cause delays in your plan
    a. The period of confirmation could range from a day to months depending on the confirmation items. An example of extended conformation would be an item that requires on vehicle noise/vibration analysis jointly with ADVICS customer.
    b. While implementing any change, the supplier is required to maintain stable production and consistent quality for current mass production parts.
    c. Some PCRs may require ADVICS customer approval, which may result in additional requirements and time (several months). Proper planning during the beginning stages with your ADVICS contact can help you be prepared and/or minimize this impact.

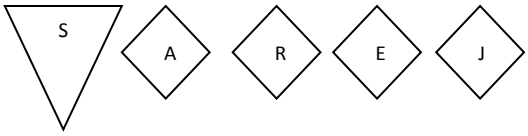
Process Change Steps

1. Determine the control level for your change according to "Table 1 Types of Changes" and "Table 2 PCR Control Level".
2. If the change is a level is A or B then submit a PCR (form IV-03-F01) to the ADVICS PUR Buyer.

3. Receive the approved PCR from ADVICS, giving instruction on what to do for mass production approval.
    - This is *not* the authorization for mass production.
4. Complete the required steps and submissions as shown on the approved PCR form.
5. Receive written approval in the form of a signed PSW from ADVICS.
    - This is the authorization to begin mass production of the change.
6. Supplier must identify the First Lot of change parts coming to ADVICS with change point tags.
    - Change point tags (provided by ADVICS) are the tags that identify first change point parts.
    - If you ship to the same part number to multiple locations, identify the first lot for each ADVICS location.
    - If you ship multiple part numbers for the same change, each part number must have change point tags. For example “left hand” and “right hand” parts must have two change point tags.
    - Do not label parts during any “trials” or “samples” phases prior to getting approval with the official “Change Point Tags”. These tags are only for use when you gain full mass production approval.

Important points

1. Supplier is required to maintain FIFO during a change. Do not ship prior level parts once you begin shipping new level parts.
2. Mass production “changed” parts are not to be shipped until the supplier receives the approved PCR or other formal part approval. **If the supplier has not received approval and a mass production delay is possible, the supplier is responsible for contacting ADVICS Production Control and Quality immediately.**
3. If changed parts are shipped without full PCR approval, those parts will result in a rejection and count against the supplier’s PPM.
4. Generally, a PCR freeze will be in effect between ADVICS 1A Trial Event and 6 mos. after start of production. This timing can vary; always contact ADVICS as soon as you know that there is a possibility of a change.
5. Special Processes are all types of Heat Treatment, Welding, Plating, and Coating.
6. Special Characteristics are:



7. Emergencies sometimes make it difficult to consider a traditional process for a PCR (ex. welding robot breaks down and a temporary process must begin immediately). In these cases, please contact your ADVICS Quality person **immediately**. ADVICS Quality will provide instructions and requirements to suppliers in these types of situations.

Types of Changes

It is necessary to issue a PCR when there are changes to parts or processes that make those parts. The table below explains each change type (10 Total), lists some example changes (change type not limited to examples), and defines how to determine the level of control (A, B or C).

Note: A change in a part due to one of the listed types requires control of the first lot, whether the change originates internally or externally to the supplier.

TABLE 1: Types of Changes

No.	Item	Explanation/Examples	A	B	C
1	Design Change	Part drawing changes where the physical structure of the part is changed. A design change when a new part drawing or ECI is issued. • New part design • Design Change the affects the part	X		
		• Design change that does not affect the physical structure of the part, such as part name or part number			X
2	New Supplier	A supplier or sub-supplier, who has never produced the part or component, begins manufacturing the part for ADVICS. • Addition of a new supplier or sub-supplier • Change the supplier or sub-supplier • New delivery location • Change from in-house production to outside supplier (or vice versa) • Change in factory location	X		
3	Material Change	The material(s) used to manufacture the part is changed. • Change the material supplier • Material supplier changed from outside to self-supplied (or vice versa) • Change in material composition (including anti-rust oil or lubrication oil)	X		
4	Manufacturing Method Change	A process method, setting, or condition used in manufacturing the part is changed or modified. This includes any change that effects the way the parts are produced as reflected in the Control Plan. This applies when the normal control range changes, not for routine adjustments. • Casting or forging method change • Sintering condition change • Heat treatment condition change • Rubber or plastic molding condition change • Welding condition change • Plating or coating condition change • Machining or cutting condition change • Process standards or setting method change	X		
		• Associate change on a critical process			X

*TABLE 1: Types of Changes (**Continued**)*

NO.	Item	Explanation/Examples	A	B	C
5	Process Order Change	The manufacturing process order is changed or deviates from the Control Plan. • Change to the order of the process, or adding or deleting process steps • Change a temporary process to a permanent one (or vice versa)		X	
6	Machine Change	When the machine initially used to produce the parts during the approval process changes or replaced by another machine. (Machine examples: stamping press, assembly line, injection or blow molding, forge press, etc.) • Initial use of a new machine • Major modification or repair of a machine • Minor modification or repair of a machine • Equipment relocation within the same plant • Equipment relocation outside the plant or building • Changes to machine control logic (e.g. software upgrade or replacement that affects machine function)	Call your ADVICS Quality Contact to set the level		
7	Jig/Tool Change	The primary or secondary tooling or jigs changes, potentially affecting the quality, function, appearance, or reliability of the part. (Jig and tool examples: welding or assembly fixtures used in manufacturing process, cooling fixtures, sonic or heat welding, etc.) • New or modified jigs and tools	Call your ADVICS Quality Contact to set the level		
8	Die/Mold Change	A die or mold used in the manufacturing process is new or changed. • New or renewed die or mold • Revision or repair of the die or mold		X	
9	Inspection Method Change	When the inspection methods of the part changes (potentially resulting in improvement or changes in performance) this may require a revision of the Control Plan. • New or modified inspection equipment • Measuring method change or measuring instrument type change.	Call your ADVICS Quality Contact to set the level		
10	Transportation/ Packaging Change	The method for transporting the part to ADVICS, or the packaging of the part deviates from the initially approved method. The change could adversely affect the quality of the part. • Change in delivery method, packaging materials or containers	Call your ADVICS Quality Contact to set the level		

PCR Control Level

There are three levels of control in the PCR process listed in the table below. If you are unsure which control level to use, contact your Quality representative.

TABLE 2: PCR CONTROL LEVELS

Control Level	***Procedure***	***Control Method***
A- PCR	• The supplier must submit a PCR (form IV-03-01) • The Supplier must obtain ADVICS Quality and Purchasing approval prior to use in Mass Production • A Change Point tag (IV-03-F02) must accompany the first change point parts for Mass Production • Supplier should contact the ADVICS PUR buyer to determine if a joint meeting should occur. Such a meeting would give a platform for the supplier to present the change in clear detail. This can help prevent delays due to misunderstandings.	• For special process changes, (ex. HT, plating, coating, welding, casting, etc…) ADVICS may perform on-site process audits. • Deliver change point parts in according to FIFO. • The supplier must keep the following information – *Date of change point part production* – *Date of delivery* – *Quality Confirmation data such as inspection or testing data*
B- PCR	• The supplier must submit a PCR (form IV-03-01) • The Supplier must obtain ADVICS Quality and Purchasing approval prior to use in Mass Production • A Change Point tag (IV-03-F02) must accompany the first change point parts for Mass Production	• Same steps as level A
C- Supplier	• Internal at the supplier	• The supplier tracks these changes. Information is available to ADVICS upon request.